

# PGF3000 Series

Linear manual faders



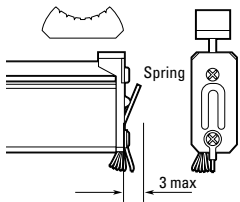
Penny+Giles PGF3000 Series faders offer the ultimate in performance having been designed for demanding professional applications. They incorporate conductive plastic tracks, precious metal contacts, environmental shielding, and are available in a choice of stroke lengths from 45mm to 104mm.

- multiple stroke lengths
- compact size
- integral track switch options
- external microswitch options
- single or dual channels
- linear, audio log or VCA outputs

## SELECT THE FADER OPTIONS YOU REQUIRE

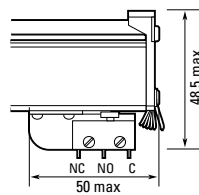
|                                                                                                        |                              |                       |                     |                      |                  |
|--------------------------------------------------------------------------------------------------------|------------------------------|-----------------------|---------------------|----------------------|------------------|
| Stroke length                                                                                          | 45 <sup>4</sup>              | 65 <sup>0</sup>       | 70 <sup>5</sup>     | 83 <sup>6</sup>      | 104 <sup>2</sup> |
| Output law                                                                                             | Log audio taper <sup>2</sup> |                       | Linear <sup>1</sup> | VCA <sup>6</sup>     |                  |
| Output channels                                                                                        | One <sup>0</sup>             | Two <sup>2</sup>      |                     |                      |                  |
| Fader type                                                                                             | series PGF3                  | stroke                | law                 | channels             |                  |
| Please enter the codes for your first three options. This will identify the fader data shown opposite. |                              |                       |                     |                      |                  |
| Resistance ±20%                                                                                        | 1kΩ <sup>B</sup>             | 5kΩ <sup>C</sup>      | 10kΩ <sup>D</sup>   | VCA2k7Ω <sup>E</sup> |                  |
| Mounting threads                                                                                       | M3 <sup>M</sup>              | 4-40 UNC <sup>U</sup> |                     |                      |                  |

## Switch options



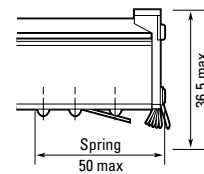
### Pre-fade listen

The switch operates before the active track is reached. This is at the infinity end of the fader and is always under spring load. Spring returns switch to off when knob is released.



### Fader start/Auxiliary

The switch operates within 4mm from the mechanical stop at the infinity end of the fader and can be microswitch or track switch based. Microswitch illustrated.



### Detent

Spring holds track switch in ON position

**Note:** For external microswitch Pre-fade listen option refer to those dimensions given under Fader start/Auxiliary added to that given under Pre-fade listen.

|                                                              |                          |                          |                          |                          |
|--------------------------------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Internal pre-fade listen track switch (2mA max)              | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 1st internal track switch (2mA max) fader start/auxiliary    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2nd internal track switch (2mA max) fader start/auxiliary    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| External microswitch (100mA max) fader start/auxiliary 1 off | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| External microswitch (100mA max) fader start/auxiliary 2 off | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| External microswitch (100mA max) pre fade listen (see note)  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Detent switch actuator and spring                            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Non-detent switch actuating slider (std for Europe)          | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Detent switch actuating slider (std for USA)                 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Only one option per column can be selected

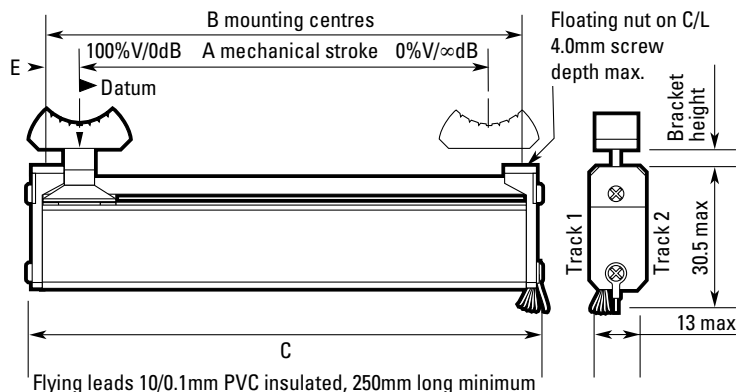
**Note:** X switch actuator standard with option 0

## Dimensions and knob bracket options

|                   |   |     |     |       |       |     |
|-------------------|---|-----|-----|-------|-------|-----|
| Stroke length     | A | 45  | 65  | 70    | 83    | 104 |
| Mounting centres  | B | 61  | 80  | 101.6 | 101.6 | 120 |
| Length            | C | 74  | 93  | 114.6 | 114.6 | 133 |
| Mounting to datum | E | 8.0 | 7.5 | 15.8  | 9.3   | 8.0 |

All dimensions shown in mm

|                |                  |                  |                  |                  |
|----------------|------------------|------------------|------------------|------------------|
| Bracket height | 4.1 <sup>A</sup> | 5.3 <sup>B</sup> | 6.6 <sup>C</sup> | 8.5 <sup>D</sup> |
|----------------|------------------|------------------|------------------|------------------|



# Output law characteristics

## Log audio taper

Maximum insertion loss 1.0dB. Typical input related crosstalk 100dB

| Type                         | Accuracy                        | Matching accuracy for stereo option (relative to track 1) | Cut off |
|------------------------------|---------------------------------|-----------------------------------------------------------|---------|
| 3420<br>3422                 | ±2.0dB (0-20)                   | -<br>±3.0dB (0-20)                                        | 80dB    |
| 3020<br>3022                 | ±2.0dB (0-30)                   | -<br>±2.0dB (0-30)                                        | 85dB    |
| 3520<br>3522<br>3620<br>3622 | ±2.0dB (0-30)                   | -<br>±2.0dB (0-20)<br>-                                   | 95dB    |
| 3220<br>3222                 | ±1.0dB (0-20)<br>±2.0dB (21-40) | -<br>±1.0dB (0-40)                                        | 100dB   |

**Note:** The ratio of fader resistance to wiper load should be 100:1 or higher.

**Test conditions:** • wiper load 100kΩ log only • element resistance 10kΩ • frequency for cut-off 15kHz  
• frequency for law accuracy 1kHz • insulation resistance 100MΩ at 500Vd.c.

## Linear

Maximum end volts 0.1%

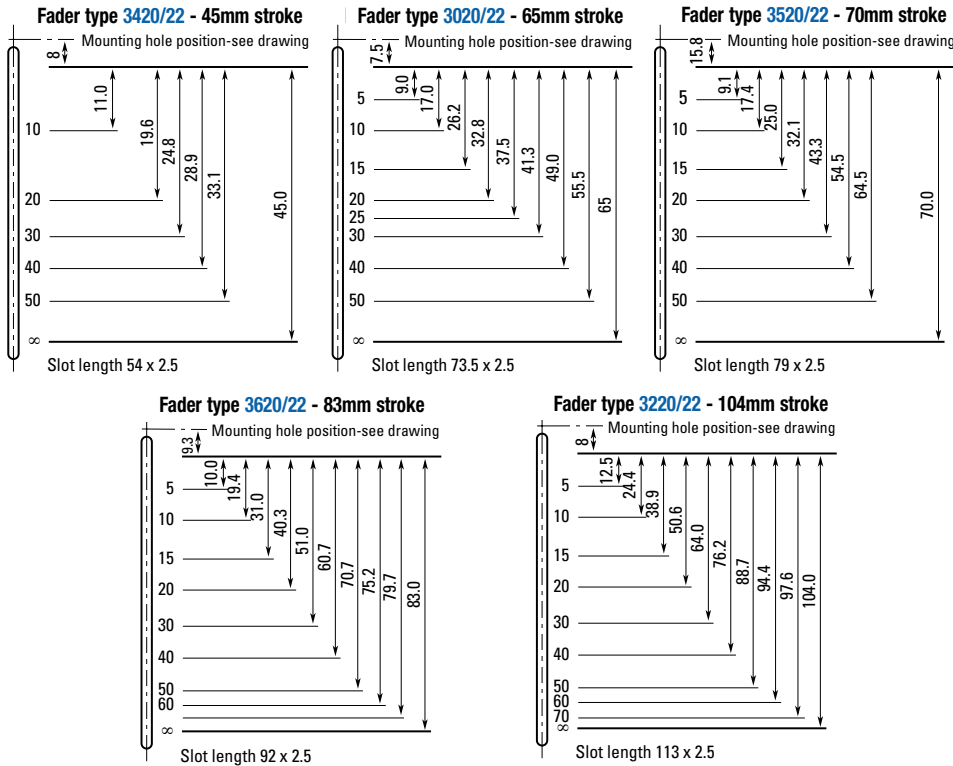
| Type                         | Accuracy | Matching accuracy (relative to track 1) |
|------------------------------|----------|-----------------------------------------|
| 3410<br>3412                 | ±3.0%    | -<br>±5.0%                              |
| 3010<br>3012                 |          | -<br>±5.0%                              |
| 3510<br>3512<br>3610<br>3612 | ±2.0%    | -<br>±5.0%                              |
| 3210                         |          | -                                       |
| 3212                         |          | ±2.0%                                   |

## VCA

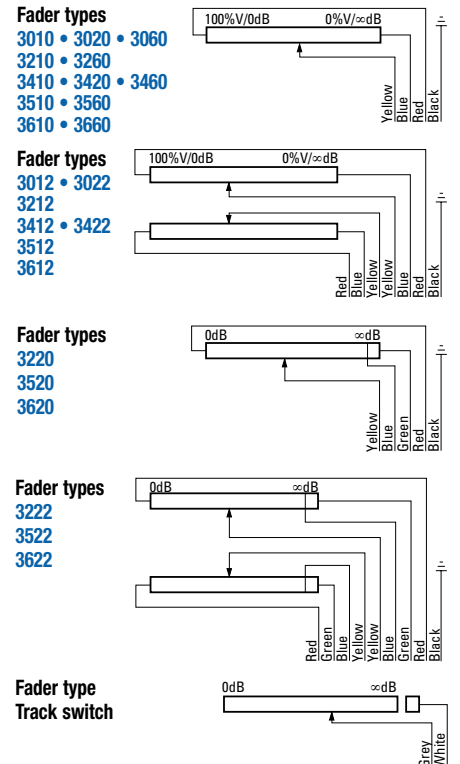
Refer to Penny+Giles for laws other than standard.

| Type | Slider travel (mm) | % Output | % Tolerance |
|------|--------------------|----------|-------------|
| 3260 | 0                  | 100      | -0.1        |
|      | 12.5               | 95       | ±2.0        |
|      | 24.4               | 90       | ±2.0        |
|      | 38.9               | 85       | ±2.0        |
|      | 50.6               | 80       | ±2.0        |
|      | 64.0               | 70       | ±3.0        |
|      | 76.2               | 60       | ±3.0        |
|      | 88.7               | 50       | ±3.0        |
|      | 94.4               | 40       | ±5.0        |
|      | 100.1              | 30       | -           |
|      | 104.0              | 0        | +0.1        |

## Panel graduations/Slots



## Circuit diagrams/Terminations



## Fader knob options

The following knob colours are available in both 11mm and 16mm widths:



11mm white are fitted as standard.

## TO ORDER OR OBTAIN A QUOTATION Please contact your nearest sales office and advise:

The series number and description, the output law, resistance, fixing threads, switches and bracket height

**For example:** • PGF3000 manual fader • 45mm stroke • log law • 2 channels • 10kΩ resistance • M3 mounting inserts • one auxiliary microswitch, non-detent switch actuating slider • 4.1mm knob bracket height. Penny+Giles would code this fader as:

Fader type **PGF3** series **4** stroke **2** law **2** channels **/ D / M / -** resistance **-** inserts **-** switches **A** bracket **/ A**